

CLAIMS

What is claimed is:

1. A method of controlling the order of processing packets, the method comprising:
 - receiving packets from a network;
 - identifying a property for at least one of the packets;
 - associating a priority level based on the property with the at least one packet;
 - inserting the at least one packet into a first queue; and
 - processing the at least one packet in an order based, at least in part, on the priority level.
2. The method of claim 1, further including:
 - associating a priority level with at least a second packet;
 - inserting the at least second packet into a second queue; and
 - processing the at least second packet in an order based, at least in part, on the priority level of the at least second packet.
3. The method of claim 1, further including attaching a packet description for the priority level to the at least one packet and the inserting into the first queue includes packets having different priority levels.



4. The method of claim 3, further including reading the packet descriptions for the packets in the queue and determining the order for processing based, at least in part, on the packet description.
5. The method of claim 1, wherein the at least one packet has a pre-designated priority value and the associating of the priority level includes disregarding the pre-designated priority value.
6. The method of claim 1, wherein the at least one packet has more than one property with different priority values and the priority level is a select one of the priority values.
7. The method of claim 1, wherein the at least one packet has more than one property with priority values and the priority level includes the sum of at least some of the priority values.
8. The method of claim 1, wherein the property is an acknowledgment packet.

9. The method of claim 8, wherein the identifying of the property is by determining the packet size.

10. The method of claim 8, wherein the acknowledgment packet is processed prior to the processing of other packets received.

11. The method of claim 1, performed by a final destination receiver station on the network.

12. A receiver station to control the order of processing packets, comprising:

- a) an input port to receive packets from a network;
- b) a controller to identify a property for at least one of the packets and to associate a priority level based on the property with the at least one packet;
- c) at least a first queue to accept the at least one packet; and
- d) a processing unit to process the at least one packet in an order based, at least in part, on the priority level for the at least one packet.

13. The receiver station of claim 12, wherein the controller is further to identify a different property for at least a second packet, to associate a priority level with the at least second packet, and to insert the at least second packet into a second queue for the priority level of the at least second packet.

14. The receiver station of claim 12, wherein the controller is further to attach a packet description for the priority level to the at least one packet and to insert packets having different priority levels into the same queue.

15. The receiver station of claim 12, further including a driver to further read the packet descriptions for the packets in the queue and to determine the order of the packets.

16. The receiver station of claim 12, wherein the at least one packet has a pre-designated priority value and wherein the controller is to associate the priority level by disregarding the pre-designated priority value.

17. The receiver station of claim 12, wherein the at least one packet has more than one property with different priority values and the priority level is a select one of the priority values.

18. The receiver station of claim 12, wherein the at least one packet has more than one property with priority values and the priority level includes the sum of at least two of the priority values.
19. The receiver station of claim 12, wherein the property is an acknowledgment packet.
20. The receiver station of claim 19, wherein the controller is to identify the property by determining the packet size.
21. The receiver station of claim 19, wherein the processing unit is to process the acknowledgment packet before processing the other packets received.
22. The receiver station of claim 12, wherein the receiver station is the final destination for the packet.

23. A computer accessible medium having stored therein a plurality of sequences of executable instructions, which, when executed by a processor, cause a receiver station to:

read a packet description for at least one packet received from a network and placed into a queue, the packet description being based on a property identified for the at least one packet, and

determine the order for processing the at least one packet based, at least in part, on the packet description.

24. The computer accessible medium of claim 23, further including additional sequences of executable instructions, which, when executed by the processor further cause the receiver station to process the at least one packet in the determined order for processing.

25. The computer accessible medium of claim 23, wherein the property is an acknowledgment packet.

26. A method of controlling the order of processing packets, the method comprising:

receiving a stream of packets from a network;

identifying an acknowledgment property packet;

associating a high priority level to the acknowledgement packet;

placing the acknowledgement packet into a priority queue;

placing the other packets into at least one other queue;

removing the acknowledgement packet from the priority queue before removing the other packets from the at least one other queue; and

processing the acknowledgement packet before processing the other packets.

27. The method of claim 26, wherein the at least one packet has a pre-designated priority value and wherein the associating the priority level includes disregarding the pre-designated priority value.
28. The method of claim 26, wherein the at least one packet has more than one property with different priority values and the priority level is a select one of the priority values.
29. The method of claim 26, wherein the identifying of the property is by determining the packet size.

30. The method of claim 26, performed by a final destination receiver station on the network.